

19981121.ba v02\_n311.bam.981121

>From ???@??? Sun Nov 22 07:56:59 1998  
Message-Id: <199811211941.NAA27510@sco.theporch.com>  
Date: Sat, 21 Nov 1998 13:39:57 CST  
Subject: BOATANCHORS digest 2311

BOATANCHORS Digest 2311

Topics covered in this issue include:

- 1) BC-349 wANTED  
by PLT1032@aol.com
- 2) RE: Titanic lies and unsung heroes.  
by polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)
- 3) Re: EARLY TV  
by polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)
- 4) Manuals  
by Jim Roik <jnroik@escape.ca>
- 5) 1930's Gangster Era Federal Sound Detector  
by John Dilks <oldradio@worldnet.att.net>
- 6) FMLA: Hygienic Radio  
by mnhopkins@juno.com (Michael N Hopkins)
- 7) Re: Titanic lies and unsung heroes.  
by Steve Berg <z931086@corn.cso.niu.edu>
- 8) Re: Titanic lies and unsung heroes.  
by W0E0M@aol.com
- 9) Re: Titanic lies and unsung heroes.  
by "Rudolf H. Salomon" <rhs@pacbell.net>
- 10) Television standards  
by Henry van Cleef <vancleef@netcom.com>
- 11) Re: Titanic lies and unsung heroes.  
by "Arden Allen" <gumbear@pacbell.net>
- 12) RE: Info, please.(RCH)  
by "Christopher A. Bowne" <radiobwn@ricconnect.com>
- 13) Magnetic recording  
by Henry van Cleef <vancleef@netcom.com>
- 14) Re: Magnetic recording  
by John Dilks <oldradio@worldnet.att.net>
- 15) RME-69 FS  
by Phil Rand <philw7bw@cvc.net>
- 16) Re: EARLY TV  
by "steve" <scb@mail.internettport.net>
- 17) Re: Television standards  
by ail0@lehigh.edu (ARTHUR I. LARKY)

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From: PLT1032@aol.com

Message-ID: <b72262d8.365633f1@aol.com>  
Date: Fri, 20 Nov 1998 22:30:57 EST  
To: Old Tube Radios <boatanchors@theporch.com>  
Mime-Version: 1.0  
Subject: BC-349 wANTED  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

WANTED!

BC-348-Q IN PRISTINE CONDITION, UNMODIFIED.  
WILL PICKUP ANYWHERE IN U.S.

BOB LINDGREN

-----  
Date: Fri, 20 Nov 1998 22:34:13 -0500  
From: polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)  
Message-Id: <199811210334.WAA28246@aa4rm.ba-watch.org>  
To: Old Tube Radios <boatanchors@theporch.com>  
Cc: boatanchors@theporch.com  
Subject: RE: Titanic lies and unsung heroes.

OK, my turn

Think it was Mullins that took a complete 'tonschreiber' back in a parts basket to CA right after ww2 & reassembled it for Mr. Bing

Got moolah & partnered with a man fm Ga Tech to buy a little xfrm company called Ampex & build the things.

Spotty story has a data point in "History of Invention & Tech" quarterly wherein a subject 2 yr.s back was the "race to vcr" & how Ampex ran away with the biz with their helical scan head spinner - great art'l

Well the Ga Tech guy split off in the 50s right about video tape intro (& stock sale) time. He founded Irish Tape in Alabama & got richer.

Same Techie (Buzz Reeves I believe - Reeves Soundcraft another venture) finally retired with all his ham gear to West Pt. NY where he expired & gave his Collins mutha lode to the Tech radio club.

I've got his 32V3 in the other room & will use it over the SS QSt weekend to talk to other BAists here like K40AH.

So on AC bias vs DC... I learned something in the thread.

Somewhere I read the 1st 'tonschreibers' used red oxide on paper backing -

quite frail.

So there's my few cents

Marty

-----  
Date: Fri, 20 Nov 1998 22:40:30 -0500  
From: polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)  
Message-Id: <199811210340.WAA28269@aa4rm.ba-watch.org>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: EARLY TV

Farnsworth's camera was snubbed by Sarnoff (nih) but glommed by GEC/Marconi in England.

It was called the "image disector" & was in exclusive use @ BBC's Alexandra Palace TV studio b4 war shut it down.

Little more fm this sector

M

-----  
Message-Id: <3.0.1.32.19981120234038.006da4b4@mail.escape.ca>  
Date: Fri, 20 Nov 1998 23:40:38 -0600  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Jim Roik <jnroik@escape.ca>  
Subject: Manuals  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Just getting into boatanchors, one of the things I have noticed is the difficulties in obtaining manuals. I've decided to see if anyone is interested in a manual exchange. I've listed the manuals I have on my webpage, and will trade copies of any of them for any manuals you might have. At this time I'm suggesting that each of us pick up our own postage and copying costs (copying costs are not a problem, but I'll wait and see where postage gets me). When I get additional manuals I will list them also.

At this time most of my manuals are for test equipment. However, I'm going to try and beg, borrow or whatever, to obtain more manuals to list. I even won't turn down donated copies to add.

Let me know what you think.

If interested, check out my page at [www.escape.ca/~jnroik](http://www.escape.ca/~jnroik)

-----  
Message-ID: <3656BE71.91C@worldnet.att.net>  
Date: Sat, 21 Nov 1998 08:21:53 -0500  
From: John Dilks <oldradio@worldnet.att.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: 1930's Gangster Era Federal Sound Detector  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

To all, This is too good to pass up.

For it's historic value only (I'm not the owner) -- there is (what I think) a rare 1930's Gangster Era Federal Sound Detector (Type SC-1) on eBAY. It is an Antique Listening device available at the time only to police with FBI approval. Made by Federal Laboratories, Inc. Pittsburgh, PA. Factory installed in handsome leather suitcase.

I've seen these in the movies only (they're probably not real anyway.) There are 5 great photos of this. item #43575148

Anyone who has a "Spy-Device" type web page could copy the photos, add more information and make an interesting and valuable page for all of us to enjoy.

--

73' John Dilks, K2TQN

Please visit my OldRadio Museum  
<http://www.eht.com/oldradio/museum>

Webmaster for the Antique Wireless Association  
<http://www.ggw.org/awa> Click on "Page 2"

--and=

for the New Jersey Antique Radio Club  
<http://www.eht.com/oldradio>

-

-----  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sat, 21 Nov 1998 10:42:41 -0600  
Subject: FMLA: Hygienic Radio  
Message-ID: <19981121.105447.-177941.0.MNHopkins@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
From: mnhopkins@juno.com (Michael N Hopkins)

"What' this?" demanded my agitated friend, tossing me a gleaned component from some side-of-the road TV set and penning me against a R-392 case he uses for a refuse can.

"One Watt, I think," I said, as I examined the resistor which was still soldered on one end to a tie strip.

"It's a two," he snapped, "but what is the VALUE?"

I noticed his white cotton, Marine-starched shirt was moist, although it was well into Fall. I doubted he was speaking of cosmic value, so I glanced at it, turned it around to be sure and, seeing it was a yellow, violet, red, answered:

"Forty seven hundred Ohms." His eyes were hawklike on me so I continued, "This is a 20% plus or minus and, since it is a pull too, I'd want to test it before..."

"That's right!" he shouted, "One of you funny-sounding short call extras can read the damn resister code!" He literally threw up his hands and stomped off up the stairway from my basement, scattering a box of Loctals on the stairway.

I looked questioningly at his bodyguard, a woman named Christie, who was sitting at the end of the bench, as usual.

"They'll pick him up up there," she assured, "We're triple teaming him today"

I was lost, but that often happens in dealings with Frank, my friend who plans to take back the 56-60 mc segment when TV moves up with a Five Meter Liberation Army. To tell the truth, they are already there and use homebrew 6M gear to get ready for a full scale attack.

"What happened?" I asked her. I was just back from a weekend trip.

"Something at the QRS meeting," she said, picking up a book she dropped about airplane phobia .

Frank sends at an easy 35 and cannot get below 20 without agitation, but this was much worse and, besides, I did not imagine he would go to a slow code meeting.

"QRP?" I ventured.

"That's it. He saw on the Internet they were having something called a builder's workshop down in Austin so he gathered up two pasteboard boxes of these old TV parts to take down there as a hostess gift but,

when we got there, it must have been the wrong kind of radios because no one wanted any of it and Mr. W. (another bodyguard) had to take it out to the Toyota (bodyguard car, Frank drives a Frazer)."

"So I sat with him. There weren't many ZLs (YLs surely, I thought, but they could have been mistakenly in a DXers meeting) and instead of doing whatever Frank expected, a bunch of guys, mostly from California but he didn't know any of them, talked about little packages of parts they had for sale. At the end Frank went up to the organizer and asked him what his 'call' was. The guy gave him a number and Frank showed him the thing he showed you from his pocket, asking the same question. But the guy said he didn't know and he always used something from Radio Shack."

"So, like," Frank then shouts, 'So why do they call you a Technocrat -- I'd call you a.....' Well, it was a good thing Mr. W. was back and we got Frank outside, but there was a church next door and Frank stops this poor guy going in for a wedding and holds him for 20 minutes. "

"Finally we got him in the car, and there was no real trouble." (Christie and her crew are armed to the caped tooth and won't let anyone touch Frank).

"I rode with him, in the front even, and he talked all two hundred miles back. Some of it was about electric stuff I don't understand, but part of it was about bedrock American virtues and we agree with him about that 100%."

Christie's W.A.R. bunch has some positions on which Frank agrees, and they just don't mention the places where he gets mad at them. I could see, of course, that the poor guy was a Technician, probably codeless and, after that clueless too.

"He been all right since, except for when I came in?"

She looked around, at nothing I thought, and said, "I don't think so."  
"You'd better go see what he's doing upstairs."

I found Frank at my son's desk, which used to be my workbench and still has a lighted magnifier. On some paper towels he was manipulating some surface mount components with a tweezer. He had other things, too, which I recognized, but had to ask about one of them.

"What you building Frank," I asked, "and what are those white tubes?"

"That is the delivery device of a feminine hygiene product, " he said, still at work, "I did not know such things existed but learned of them in  
one of your daughter's magazines. Miss Christie was kind enough to

procure me a box of them. She sent the young man you call the WARmon for them after a short discussion."

My daughter is nine, but Frank reads everything. It would have been pointelss to tell him they have such things on TV too because we don't have one and Frank just listens to the FM of Channel 2 with his supergenny.

"My goal is to produce a kit version of a complete Morse code transceiver to fit where the original payload sat," he continued.

Frank has a coffeecans full of money so I asked, "Why/"

"So they can take it along with them," he replied.

73 de ab5L, michael in Dallas, student of Six Meters' Golden Age, 1957-58, and two of its jewels: Tecraft and International Crystal ham products.

Michael N. Hopkins  
Box 226841

FMLA XVI/bg

Dallas, TX 75222 MNHopkins@Juno.com

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You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com/getjuno.html>  
or call Juno at (800) 654-JUNO [654-5866]

-----  
Message-Id: <3656F75E.96A6B506@corn.cso.niu.edu>  
Date: Sat, 21 Nov 1998 11:24:47 -0600  
From: Steve Berg <z931086@corn.cso.niu.edu>  
Mime-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Titanic lies and unsung heroes.  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Some years ago, I worked with a gent named Marvin Camras at IIT Research Institute, in Chicago. He had developed a number of patents in the wire and tape recording area around WWII. Once, the library had an exhibit of some of his work. One was a playback system with a large amplifier. I think it was a wire recorder, but I cannot recall exactly. Some of these were built, and put ashore just before the Normandy Invasion with a recording of one of the American assaults in the Pacific installed in it. It was supposed to be a decoy for the Germans. Marvin also had a patented system for putting sound on

movies. According to the exhibit, his press conference announcing his invention was a movie starring himself, announcing his technological feat. I met him, and chatted briefly with him at lunch one day. He spent most of the time discussing bureaucratic stupidity, not technical matters. While he had an office in the research institute, he spent most of his time teaching at IIT.

Steve WA9JML

-----  
From: W0EOM@aol.com  
Message-ID: <f6a2330.3656f782@aol.com>  
Date: Sat, 21 Nov 1998 12:25:22 EST  
To: Old Tube Radios <boatanchors@theporch.com>  
Cc: boatanchors@theporch.com  
Mime-Version: 1.0  
Subject: Re: Titanic lies and unsung heroes.  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Hello to all;

I would like to add a bit about the history of tape recording, using as a reference Electronics in the West' by Jane Morgan Jack Mullin was working in the the Paris Signal Corps lab in 1944 when several German tape recorders (Magnetophone) were brought in for analysis. One was sent back to the U.S. and the rest ordered destroyed. jac;k managed to save two, and sent them home in pieces. Returning home in 1945, he rebuilt them and began recording sound for 16-mm films, as a partner in the W.A. Palmer Co. Another person, Richard Ranger, went back to Germany and a Magnetophone to do similar work. In June 1946, Mullin gave a talk at an IRE meeting in San Francisco about the tape recorders. Harold Lindsay, who was at the meeting, was very interested and talked at length with Mullin. Later Linday was doing some consulting for Ampex, who made electric motors, and told Alex Poniatoff about the machines. Ampex started building their own machine in Dec 1946, and hired Lindsay away from Dalmo Victor to be project engineer. After a long struggle, a wrking maching was completed in Aug 47.

In the meantime, Bing Crosby had heard of Mullin's Magnetophone, and hired him to tape 26 shows for the 1947-48 season. Mullin told Ampex what he was doing and how happy Bing was with the results. the Ampex team headed for hollywood to demo their machine. which had a number of improvements. This resulted in an order from Crosby for 20 machine, for himself and the network stations, at \$4000 ea, to be delivered in 6 months. Ampex worked night and day to make the delivery, and was soon known for making some of the finest taperecorders available.

One of the points here is that Bing had nothing to do with the early technical



development of tape recorders, but was the "venture capitalist that made it happen.

Will Jensby from the Silicon Valley

-----  
Message-ID: <3656FBF9.5E16@pacbell.net>  
Date: Sat, 21 Nov 1998 09:44:25 -0800  
From: "Rudolf H. Salomon" <rhs@pacbell.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Titanic lies and unsung heroes.  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I presently work in what was once the Bing Crosby recording studios, in Camarillo, California.

This site was purchased by the 3M company in the early 60s. 3M produced various tape recorders and tape media at this site.

We are still manufacturing tape and digital data tape cartridges under the name of "Imation" after 3M divested itself of the Data Storage Division approximately 2.5 years ago.

Working for 3M, and now Imation, in their tape manufacturing business in California has allowed me an interesting glimpse or two at the history of tape recording through classes and lectures at various times put on by some of the people involved in pioneering tape recording.

The wire recorder was invented by one, Valdemar Poulson, around 1900, and was at that time commercialized as the "Telegraphone".

2 interesting websites that tell the history of magnetic recording pretty much as I have come to know it are:

<http://www.kcmetro.cc.mo.us/pennvalley/Biology/lewis/crosby/mullin.htm>  
<http://www.rci.rutgers.edu/~dmorton/magnetic.html>

73 de Rudy Salomon - KD6NRQ

-----  
From: Henry van Cleef <vancleef@netcom.com>  
Message-Id: <199811211753.JAA28846@netcom16.netcom.com>  
Subject: Television standards  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sat, 21 Nov 1998 10:53:55 -0700 (MST)  
MIME-Version: 1.0

Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

I've been reading some of the other posts on both topics here. I think that one has to be careful where they get their history--- "Empire of the Air" is only half-truth, and not a good historical source. Some good sources are some of the technical books from the period of development.

Zworykin, V.K., and G.A. Morton, "Television" (New York, John Wiley and Sons, 1940) is an excellent source for television history. It does describe Farnsworth's "image dissector" camera tube, and while the coverage might be considered "short shrift," does at least acknowledge John Logie Baird's work and mentions British broadcasting from 1936 (a clue to the scholar to look further into that history), also shows Philips TV broadcast equipment from 1938. The elements of the RS-170 NTSC video standard as they were developing in 1939, with a good discussion of technical rationales for these elements, is also given in the book. As outlined (remember, this is primarily 1938-9 material), single sideband video, 441 lines, 60 Hz interlace frames, and AM audio are given.

The RS-170 standard that was agreed on in the fall of 1941 differed from this in specifying 525 lines and FM audio. I think that the shift from 441 to 525 lines was made in 1939 or 40 (Worlds Fair TV displays ?). Specification of FM audio was a last-minute change in the summer of 1941. However, the 1941 standard was the same standard that was used through the 1940's, and the alteration of the standard to include RCA color does not change the black-and-white attributes of the standard---1999 analog TV still is compatible with the Nov. 1941 standard.

The early "experimental" production TV's made by Andrea (FADA), Dumont, Philco, RCA, etc. could easily be modified from 441 to 525 lines, and the AM sound detectors could be used to demodulate FM by tuning them to "slope detect" the signals. Transvision's kits from the 1946-50 period still used slope detection with an AM detector.

Zworykin/Morton gives the schematic of the RCA "experimental" 5-inch receivers, so you can study that to your heart's content. It also gives a home-brew construction project for a TV receiver that "you can build yourself" (a bit daunting for most amateur constructors in the era). Following some of Zworykin's discussion does require a solid grounding in physics and seems to me quite far advanced from Terman's presentations for undergraduate EE's of the day (and I am an unabashed Terman fan).

Farnsworth's and Baird's work was regularly published in electronic

journals in the 1930's (principally "Proceedings of the IRE" in the US) and wasn't a secret. I'm not aware of a really good international history of the development of electronic television, but the sources are fairly readily available if you want to chase down the journals of the 1930's. Unfortunately, most of my knowledge of TV development history is pretty casual---I worked with a man at Tektronix (Charles Miller) who had been on the 1941 NTSC standards committee, who summarized the history of TV development for Tektronix engineers in our Field Training courses, but didn't keep a copy of our lecture notes (which I used when I had to cover for him when he was on long term disability after having gotten a jolt of +225 out of a scope).

Mary Texanna Loomis and Alfred Ghirardi both discuss television (principally, mechanical scanning types) in their 1930-33 texts. Unfortunately, Zworykin says very little about European electronics in the mid-30's, but it is clear that the British were able to put an all-electronic TV broadcast on line in 1936, which means that they had done the same sort of development of wide-band video amplifiers as Zworykin describes for the US in the early thirties.

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=====  
Hank van Cleef  
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-----  
Message-Id: <199811211811.KAA10103@mail-gw5.pacbell.net>  
From: "Arden Allen" <gumbear@pacbell.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Titanic lies and unsung heroes.  
Date: Sat, 21 Nov 1998 10:12:14 -0800  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Magnetomaniacs;

Magnetic tape recording history.....gotta be the best thread of the year. Makes me want to get out my purchased new is '63 Sony 300 (definitely a BA.....I used to have some Irish tape also). I'm afraid the rubber tire idler wheels are shot though. I wonder if one can still obtain replacement idlers. Anyone know?

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

-----  
Message-ID: <01BE1552.072ACE60@mys9.riconnect.com>  
From: "Christopher A. Bowne" <radiobwn@riconnect.com>  
To: Old Tube Radios <boatanchors@theporch.com>

Subject: RE: Info, please.(RCH)  
Date: Sat, 21 Nov 1998 13:22:41 -0500  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

The RCH is the Navy version of the SLRF. Other than the Navy ID tag, I don't believe there is anything different between the two.

73,

Chris Bowne, AJ1G  
Stonington, CT  
radiobwn@riconnect.com

-----  
From: Henry van Cleef <vancleef@netcom.com>  
Message-Id: <199811211823.KAA01295@netcom16.netcom.com>  
Subject: Magnetic recording  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sat, 21 Nov 1998 11:23:53 -0700 (MST)  
MIME-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

I'm working pretty much from memory on this.

Vladimir Poulsen (Danish, I think) described a magnetic recorder in 1898, and I think built a working model. This, of course, had to use telephone technology of the day, had no bias, and no amplification, and was only a demonstration of a principle. However, workers in the US and in Europe in the 1920's and afterward did try to develop Poulsen's principles into an acceptable technology.

There was an article in the journal of the Hist. of Science Society (US) several years ago that described the work done at Bell Labs to develop a magnetic recording telephone answering machine ca. 1934-38. AC bias was one of the things used to obtain audio quality. The article describes reasons why this device was not marketed by the Telcos. A major problem at the time was the lack of a suitable inexpensive recording medium. The Bell Labs technology was primarily directed toward all-metal bands, which have mechanical problems (a broken band is a disaster) as well as electrical (requires a lot of power to magnetize a relatively large mass). Experiments with coated

paper had problems with magnetic material rub-off (mechanical clogging) as well as paper breakage. The Germans pursued this route, and the "Magnetophon," with AC bias, using a variety of tape materials (none reliable and durable) was around in the late 1930's and fairly well known.

US developments moved to drawn wire as a magnetic material. Wire machines were used by the US military ca. 1943, and became commercially available immediately after WWII in the US (the Webster-Chicago 79 transport). 3M (Minnesota Mining and Manufacturing) worked on development of a suitable tape medium, and I think that they had a suitable tape (low breakage, good magnetic characteristics, good wear resistance) available around 1948. I have a 1949 Webster-Chicago wire dictating machine that my father bought, and that I refurbished a few years ago to play wires recorded in the 1947-57 period (on a model 80, which smoked its power transformer back in the 50's) and found its performance to be surprisingly good. The Webster-Chicago technology ran at about 22 inches per second, on an .004 inch dia. chrome steel wire, and handles over 10Khz. of bandwidth. The one major objection is that the drive across the head (which "vibrates" up-and-down like a fishing reel level-winder) is reel-to-reel, with no drive capstan to stabilize wire speed, giving a noticeable (piano recordings are an acid test) flutter-and-wow. Bing Crosby's funding of Ampex in the early fifties were not for development of the basic technology, but for bringing it up to quality standards that could be used for broadcast distribution.

I'm surprised nobody has asked what is meant by "AC bias" or why it is used. The AC bias is a high frequency AF signal, typically around 50 Khz, that is superimposed on the AF recording signal. It's primary function is to assure that there is enough magnetic force at all times to assure that the AF signal does not have crossover distortion in the magnetic hysteresis gap that is present in all magnetic materials (where a change in magnetizing force produces no change in the magnetization of the iron).

--

=====  
Hank van Cleef  
=====

-----  
Message-ID: <36570910.6E4A@worldnet.att.net>  
Date: Sat, 21 Nov 1998 13:40:16 -0500  
From: John Dilks <oldradio@worldnet.att.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
CC: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Magnetic recording

Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Henry van Cleef wrote:

> I'm surprised nobody has asked what is meant by "AC bias" or why it is  
> used. The AC bias is a high frequency AF signal, typically around 50  
> Khz, that is superimposed on the AF recording signal. It's primary  
> function is to assure that there is enough magnetic force at all times  
> to assure that the AF signal does not have crossover distortion in the  
> magnetic hysteresis gap that is present in all magnetic materials  
> (where a change in magnetizing force produces no change in the  
> magnetization of the iron).

-----

Hank,

The reason is, we all knew that. :-) Thanks.

--

73' John Dilks, K2TQN

Please visit my OldRadio Museum  
<http://www.eht.com/oldradio/museum>

Webmaster for the Antique Wireless Association  
<http://www.ggw.org/awa> Click on "Page 2"

--and--

for the New Jersey Antique Radio Club  
<http://www.eht.com/oldradio>

-

-----  
Message-ID: <36570A95.D8FFDEDA@cvc.net>  
Date: Sat, 21 Nov 1998 10:46:45 -0800  
From: Phil Rand <philw7bw@cvc.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: RME-69 FS  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Greetings from Oregon,

Time to get leaned down and have an excellent condition RME-69 and matching speaker for sale. Looks almost new inside and out and plays just great. If interested, post me and we can talk. Have manuals with the rx.

philw7bw@cvc.net

Thanks and 73,

Phil W7BW

-----  
Message-Id: <199811211908.NAA07008@loki.internettport.net>  
From: "steve" <scb@mail.internettport.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sat, 21 Nov 1998 12:49:44 +0000  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Subject: Re: EARLY TV  
CC: Old Tube Radios <boatanchors@theporch.com>

>Oh boy, here we go again. Define "camera." Define "television." Guys  
>moving pictures by the early 1920s! They had an awful lot of moving  
>mechanical parts and resolution wasn't much, but they worked. (Jenkins  
>was an especially good one--he was even getting decent greyscale). Phone  
>Company had some stuff working, too. Baird was making even better  
>"mechanical" TV pix in the same timeframe.

Hi Bobbi & Group;

Then there was the 1928(?) Alexandersson/ Westinghouse/ ATT- Bell  
labs public demo of the serpentine neon tube "large screen"  
monster(osity). Anode tabs spaced inside the considerable length of  
the tube were "scanned" by a \*very\* large commutator & brush synched  
to the "camera". Still no true electronic camera tho'. A modified  
motion picture arc lamp with a scanning disc and an optical  
projection system "scanned" a darkened room while 3 very large cesium  
photo tubes arrayed in a hood around the lens of the projector  
retrieved the reflected spot for amplification and transmission. It  
worked, but----.

Regards; Steve

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Message-Id: <199811211932.0AA83782@ns5-1.CC.Lehigh.EDU>  
Date: Sat, 21 Nov 1998 14:32:02 EST  
From: ail0@lehigh.edu (ARTHUR I. LARKY)  
Subject: Re: Television standards  
To: Old Tube Radios <boatanchors@theporch.com>

Hank van Cleef wrote:

>The RS-170 standard that was agreed on in the fall of 1941 differed

>from this in specifying 525 lines and FM audio. I think that the  
>shift from 441 to 525 lines was made in 1939 or 40 (Worlds Fair TV  
>displays ?). Specification of FM audio was a last-minute change in  
>the summer of 1941. However, the 1941 standard was the same standard  
>that was used through the 1940's, and the alteration of the standard  
>to include RCA color does not change the black-and-white attributes of  
>the standard---1999 analog TV still is compatible with the Nov. 1941  
>standard.

The incompatibility of their color method with B&W TV sets was a major reason why the CBS electromechanical system was not adopted. The other reason was that people were concerned that the spinning disk might take off some day and slice up the viewers. (Also it was too big since it had to have a diameter of twice the picture size.) I remember that CBS actually did broadcast their version of color which could be seen, sort of, on a B&W tv if you adjusted the horizontal and vertical synch properly. You got multiple images of the "picture-in-picture" variety when you did that.

Compatibility was achieved by broadcasting the color information on a subcarrier (3.579545 Mhz = 14.31818 divided by 4; which explains why xtals of that frequency are so plentiful) and transmitting the intensity information multiplexed to give normal B&W modulation.

>The early "experimental" production TV's made by Andrea (FADA),  
>Dumont, Philco, RCA, etc. could easily be modified from 441 to 525  
>lines, and the AM sound detectors could be used to demodulate FM by  
>tuning them to "slope detect" the signals.

We had a Dumont pre-war TV in the fraternity house at Lehigh University in 1948. It never worked very well because there were no local stations and Philadelphia was over the mountain to the south of us. I wish I still had the set for its historical interest.

My brother worked on color TV at RCA Princeton and has some color tv patents. I used to have, and maybe still have, one of their chassis' from their color TV lash-ups in the basement.

Art K3HBA

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End of BOATANCHORS Digest 2311  
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